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President Eisenhower's Message on Education

THE WHITE HOUSE

TO THE CONGRESS OF THE UNITED STATES:

IN SEVERAL previous messages to the Congress, I have called attention to the status of American education—to accomplishments of the past and to certain problems which deeply involve the national interest and welfare.

Today, more Americans are receiving a higher level of education than ever before. Progress has been made in building more and better schools and in providing more and better teachers. And yet problems in education still persist, and time has more clearly defined their scope and nature.

The educational task in this country is basically a State and local responsibility. Looking ahead, that task is unprecedented in its sheer magnitude. Elementary and secondary schools already are overflowing under the impact of the greatest enrollment increase in our history. The number of pupils in public schools has increased by 5½ million in the past 5 years, and will further increase by about 6 million in the next 5 years.

We have already reached an all-time peak in enrollment in colleges and universities. Yet, in the next 10 to 15 years, the number of young people seeking higher education will double, perhaps even triple.

Increasing enrollments, however, by no means represent the whole problem. Advances in science and technology, the urgency and difficulty of our quest for stable world peace, the increasing complexity of social problems—all these factors compound our educational needs.

One fact is clear. For the States, localities, and public and private educational institutions to provide the teachers and buildings and equipment needed from kindergarten to college, to provide the quality and diversity of training needed for all our young people, will require of them in the next decade the greatest expansion of educational opportunity in our history. It is a challenge they must meet.

State and local responsibility in education nurtures freedom in education, and encourages a rich diversity of initiative and enterprise as well as actions best suited to local conditions. There are, however, certain underlying problems where States and communities—acting independently—cannot solve the full problem or solve it rapidly enough, and where Federal assistance is needed. But the Federal role should be merely to facilitate—never to control—education.

Teachers

Solutions to all the other problems in education will be empty achievements indeed if good teaching is not available. It is my earnest hope that the

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States and communities will continue and expand their efforts to strengthen the teaching profession.

Their efforts already have accomplished much. Progress has been made in reducing the teacher shortage. There are encouraging increases in the number of persons training to teach and the proportion of those so trained who enter the profession. Still, this year, thousands of emergency teachers with substandard certificates had to be employed. Far more needs to be done in our various communities to enhance the status of the teacher—in salary, in community esteem and support—and thereby attract more people to the profession and, equally important, retain those who bear so well the trust of instructing our youth.

Office of Education

By providing statistics and analyses on trends in education, and by administering other services, the U. S. Office of Education performs a valuable role in helping public and private educational institutions better to perform their tasks.

A significant first step was taken last year toward strengthening the Office of Education. The appropriation for the Office was increased to implement a cooperative research program, and to expand statistical and professional advisory services and studies.

This year I am asking for increases in funds for these activities, because they hold such promise for real progress toward solving some of the basic and long-standing problems in education.

Education Beyond the High School

If the States, localities and public and private educational institutions are successfully to meet, in the next decade, the increasing needs for education beyond the high school, their effort must begin now. The Federal Government, however, can take certain appropriate steps to encourage such action.

Already the Congress has enacted legislation for long-term loans by the Housing and Home Finance Agency to help colleges and universities expand their dormitory and other self-liquidating facilities.

Last year I appointed a Committee on Education Beyond the High School, composed of distinguished educational and lay leaders, to study and make recommendations in this field. The Committee's interim report of last November delineates issues that should have the most careful attention.

It pointed out that much more planning is needed at the State level to meet current and future needs in education beyond the high school. The Congress at the past session enacted Public Law 813, which authorized Federal funds to help the States establish State committees on education beyond the high school. The funds, however, were not appropriated. I recommend that the Congress now appropriate the full amount authorized under this legislation.

The State committees can do much to promote discussion, define problems, and develop recommendations. Their recommendations, however, must be supplemented by detailed plans to meet specific needs for expansion of physical facilities, enlargement of faculties, and other adjustments which may provide new or different institutions. Such detailed planning requires the coordinated effort of both public and private education in each State—and time, personnel, and funds.

I recommend that the Congress amend Public Law 813 so as to authorize grants to the States of $2.5 million a year for three years for these purposes.

Federal Aid for School Construction

Of all the problems in education, one is most critical. In 1955, and again last year, I called attention to the critical shortage of classrooms in many communities across the country. The lack of physical facilities is a temporary emergency situation in which Federal assistance is appropriate. Unquestionably, a very considerable portion of the shortage is due to World War II restrictions on all types of civil construction including schools. With Federal help the States and communities can provide the bricks and mortar for school buildings, and there will be no Federal interference with local control of education.

I again urge the Congress to act quickly upon this pressing problem.

Today there are enrolled in our public schools about 2¼ million children in excess of the normal capacity of the buildings in use. These children are forced to prepare for the future under the handicap of half-day sessions, makeshift facilities, or grossly overcrowded conditions. Further, many classrooms which may not be overcrowded are too old or otherwise inadequate. They should be promptly replaced.

The need for Federal assistance in eliminating this shortage is not theory, but demonstrated fact. It cannot now be said—realistically—that the States and communities will meet the need. The classroom shortage has been apparent for a number of years, and the States and communities have notably increased their school building efforts. Each year, for

several years, they have set a new record in school construction. And yet, in the face of a vast expansion in enrollments each year, many areas are making inadequate progress in reducing the shortage accumulated over many past years. The rate of State and local construction is spotty, with noticeable lags in areas where needs are expanding most rapidly.

I propose, therefore, a comprehensive program of Federal assistance. The program is designed to accomplish in four years what last year's proposal would have done in five, since one year has already been lost. I urge the Congress to authorize:

(1) Federal grants to the States for school construction, at the rate of $325 million a year for four years, a total of $1.3 billion.

(2) The authorization of $750 million over the four-year period for Federal purchase of local school construction bonds when school districts cannot market them at reasonable interest rates. These loan funds would be made available to the States on the basis of school-age population. The State educational agency would determine the priority of local school districts for Federal loans based on their relative need for financial aid in the construction of needed school facilities.

(3) Advances to help provide reserves for bonds issued by State school-financing agencies. This would facilitate the issuance of these bonds to finance schools which would be rented and eventually owned by local school districts.

(4) The expenditure of $20 million in matching grants to States for planning to strengthen State and local school construction programs.

As I indicated in my message on the State of the Union, I hope that this school construction legislation can be enacted on its own merits, uncomplicated by provisions dealing with the complex problems of integration.

Basic Principles

Certain basic principles must govern legislation on Federal grants for school construction, if they are to serve the cause of education most effectively.

First, the program must be recognized as an emergency measure designed to assist and encourage the States and communities in catching up with their needs. Once the accumulated shortage is overcome, if State and local autonomy in education is to be maintained, the States and communities must meet their future needs with their own resources and the Federal grant program must terminate. The States and communities already are building schools at a rate which clearly shows their ability to do this.

Second, Federal aid must not infringe upon the American precept that responsibility for control of education rests with the States and communities. School construction legislation should state this policy in no uncertain terms.

Third, Federal aid should stimulate greater State and local efforts for school construction. Many States now make no contribution to school construction, and in some States which do contribute the amount is relatively small. Further, to increase total funds for school construction, Federal grants should be matched by State-appropriated funds after the first year of the program.

Fourth, the allocation of Federal funds among the States should take into account school-age population, relative financial ability to meet school needs, and the total effort within the States to provide funds for public schools. An allocation system based solely on school-age population would tend to concentrate Federal aid in wealthy States most able to provide for their own needs. An allocation system which provides more assistance to States with the greatest financial need will help reduce the shortage more quickly and more effectively.

Fifth, in distributing grants under this program within each State, priority should be given to local districts with the greatest need for school facilities and the least local financial ability to meet the need.

In a Nation which holds sacred the dignity and worth of the individual, education is first and foremost an instrument for serving the aspirations of each person. It is not only the means for earning a living, but for enlarging life—for maintaining and improving liberty of the mind, for exercising both the rights and obligations of freedom, for understanding the world in which we live.

Collectively, the educational equipment of the whole population contributes to our national character—our freedom as a Nation, our national security, our expanding economy, our cultural attainments, our unremitting efforts for a durable peace.

The policies I have recommended in education are designed to further these ends.

DWIGHT D. EISENHOWER

THE WHITE HOUSE,
January 28, 1957.

New Educational Administration Association

THE FORMATION of the Collegiate Association for the Development of Educational Administration in New York State has recently been announced. Eligible for membership are the 29 institutions in the State that provide programs of training in school administration. The purposes of the new association are to improve the teaching of school administration and programs of development of school administrators in the State and to conduct research on problems of school administration.

Death of Former Commissioner Claxton

PHILANDER PRIESTLEY CLAXTON, Commissioner of Education from 1911 to 1921, died on January 12, 1957, in Knoxville, Tenn., at the age of 94.

Appointed Commissioner by President Taft, Dr. Claxton served throughout the two administrations of President Wilson and during the first few months of the Harding administration. He was born in Tennessee in 1862 and received the A. B. and A. M. degrees from the University of Tennessee. He also carried on graduate studies in Germany and at Johns Hopkins University. Honorary doctorates were conferred upon him by several institutions, Western Reserve University and the University of North Carolina, among others.

Following several years in school superintendencies and in normal school teaching in North Carolina, Dr. Claxton in 1902 became professor of education at the University of Tennessee and was in that position when appointed Commissioner. At Tennessee, he served as high school visitor and headed the noted Summer School of the South. After leaving Washington, the former Commissioner held successively the positions of provost of the University of Alabama, superintendent of Tulsa, Okla., schools, and president of Austin Peay State College, Clarksville, Tenn. In 1946, he retired from the latter position after a tenure of 16 years.

Although 84 years of age at the time of his retirement, Dr. Claxton retained an active interest in education. This interest, evidenced especially by his writing, remained unabated until virtually the time of his death.

Engineering Enrollments and Degrees, 1956

THE OFFICE OF EDUCATION has issued as Circular No. 491, an advance summary of the data collected in the eighth annual survey of engineering enrollments and degrees conducted by the Office in cooperation with the American Society for Engineering Education (ASEE). The circular gives, for 20 curriculums, national enrollments by class levels in the fall of 1956, and degrees conferred on men and women in the same curriculums during the year ending June 30, 1956, at the bachelor's, master's, and doctor's level.

Highlights of the 1956 survey, in addition to those shown in Circular 491, are:

The engineering freshman class is the second largest in history, numbering 77.7 thousand, an increase of 6.7 percent over last year, compared to an increase of 4.9 [1] percent for all college freshmen.

Total engineering enrollment reached a new alltime high of 277.1 thousand, an increase of 13.8 percent over last year, compared to an increase of 8.3 [1] percent for all college enrollment.

Percentage changes in engineering degrees granted (1955–56 compared to 1954–55) are: Bachelor's +16.5, master's +5.4, doctor's +1.8 percent. Estimated changes in all college degrees are: Bachelor's +14.0, master's −1.3, doctor's −6.4 percent.

Much more detailed reports will be published as usual, by ASEE in the Journal of Engineering Education, and by the Office as Circular No. 494. ASEE will report statistics by class level for each of the 151 institutions accredited by the Engineers' Council for Professional Development (ECPD). Circular 494 will contain enrollment and degree data for each curriculum at the bachelor's, master's, and doctor's level, with indication as to ECPD accreditation, for each of the 217 colleges conferring degrees which are listed in the USOE Education Directory Part 3, Higher Education.

[1] The percentage changes shown above for all college freshmen and for all college enrollment were computed on the basis of direct comparison of the 1956 enrollments with those for 1955 as reported in these columns in January 1956. Since they were computed, the Office of Education has made a reclassification of institutions by type which excludes from "degree-credit enrollment" statistics the enrollment in 35 two-year institutions devoted wholly or principally to the training of technicians or other semi-professional personnel. If the enrollment in these institutions is deducted from the 1955 figures the percentage change for all college freshmen is 7.1 percent and that for all-college enrollment 10.0 percent instead of the figures shown above.

The Southern Regional Education Board
A Summary of Operations 1949-57

By SEBASTIAN SOMMER*

DURING the 8 years of the Southern Regional Education Board's existence, the picture of higher education in the South, as well as the rest of the Nation, has undergone tremendous change. Developments within the SREB and in its programs have reflected this change.

When first established in 1949, the SREB's major task was to aid States and institutions in improving the quality of higher education and to help the region make the best use possible of existing facilities. To this end, and also to aid institutions in developing programs which would meet the social and economic needs of the region, the Southern Governor's Conference approved an interstate compact designed to provide the machinery for establishing regional programs in graduate and professional education.

Southern Regional Education Compact

The Southern Regional Education Compact, now ratified by the legislatures [1] of 16 Southern States, provides for a board consisting of the Governors of the States, ex officio, and three members appointed by each. This provision is now being amended by the States to include one additional member from each State and to require that at least one of each State's members be a member of the legislature. This board meets annually. An executive committee is provided which has the full power of the board and is composed of not less than one member from each State. A staff is maintained in Atlanta with John E. Ivey, Jr., as its director.

Interstate Contracts

Probably the most significant undertaking in the board's formative years was the establishment of interstate contracts. Through its unique position as an interstate compact organization, the SREB was able to establish contracts with States which wished to use the services of institutions in other States and help defray the cost of education of the students.

Contracts were made in medicine, dentistry, veterinary medicine, and social work. In dentistry and medicine, sending States paid receiving institutions through the SREB, $1,500 per year per student; in veterinary medicine, $1,000; and in social work, $750. These payments were recently increased (effective July 1, 1958) by action of the board to $2,000 in medicine and $1,500 in veterinary medicine. Payments for social work and dentistry contracts remained the same.

In the 8 years of the contract operations, the States have spent $7,663,987. About 1,000 students have been graduated under contracts, and about 1,000 more students are now attending institutions. In several States, the existence of the contracts has spelled the difference between establishment of unnecessarily duplicating educational plants and the use of available moneys for more urgent projects. Louisiana, for instance, in an attempt to determine the necessity for establishing a school of veterinary medicine, called on the SREB to furnish data on veterinary medical education in the South. The subsequent study showed that existing schools could take care of Louisiana's needs at that time and in the foreseeable future. On the basis of the report, the State's legislature decided to use the funds to establish instead a research center in animal health at Louisiana State University.

Memoranda of Agreement

During this period the SREB has also been concerned with the overall problems of higher education in the South. Several devices have grown out of comprehensive studies of problems facing college administrators, faculty, and government officials concerned with higher education.

One of the primary cooperative devices developed in addition to the contracts was Memoranda of Agreement signed by several institutions and the SREB. These memoranda, developed in specific fields such as forestry, city planning, and research-library administration, outline methods of cooperation to achieve maximum educational quality and efficiency on a regional basis.

An outstanding example of a memorandum pro-

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[1] Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

gram is the one in graduate nursing education and research. At the beginning of the program, offerings in graduate nursing education in the South were limited to two master's degree programs in public health nursing. It was found that one of the great problems in securing nurses with graduate training for the South lay in the fact that they were receiving their training out of the region. The tendency for such persons is to take positions near the school from which they receive their degrees; the need for new graduate nursing programs in the South was therefore obvious. It is also demonstrable that students will not use facilities too far removed from their place of residence.

Since the memorandum of agreement in graduate nursing education and research has been signed by the six cooperating schools in the region, graduate programs have been developed in maternal and child care teaching, supervision and advanced practice; medical-surgical teaching and supervision; psychiatric teaching, supervision, and advanced practice; and nursing service and education administration. The six schools which are working cooperatively in offering these programs are the Universities of Alabama, Maryland, North Carolina, and Texas, and Emory and Vanderbilt Universities.

Because the nursing education project is based on regional cooperation, it gained the support of the W. K. Kellogg Foundation and the Commonwealth Fund. In fact, when first approached with a proposal, one of these foundations stated that it would not be able to lend support unless three or more schools were involved. The total support for 5 years of the program (1954–59) has amounted to approximately $750,000. The Commonwealth Fund has granted $360,000 to the six schools for fellowships and approximately $60,000 to the SREB for the support of seminars.

The Kellogg Foundation funds have been granted directly to the schools and total approximately $330,000 for the 5-year period. These funds are used to help the participating schools establish their new graduate programs, help underwrite the costs of instruction, and pay for travel of participants to the seminars at which deans and graduate directors of the schools plan their programs with the aid of nationally prominent consultants.

Other memoranda agreements operate in educational television, city planning, forestry, pulp and paper technology, research-library cooperation, statistics, marine sciences, and petroleum sciences. The aim of these memoranda in all cases is to aid signatories in improving quality and broaden opportunities where practical.

Each of the programs is guided by an advisory body called variously commission, council, or committee. The groups are composed of persons either directly connected with the profession or indirectly interested in a particular phase, such as legislative leaders or lay citizens.

Annual Legislative Work Conference

Another device to help the States promote regional cooperation grew out of the need for creating a better understanding of the role of higher education between public officials, educators, and legislators. It is the annual Legislative Work Conference on Southern Regional Education. The first of these conferences was held in Nashville, Tenn., in 1952 and had as its purpose "to find methods by which legislative leaders of the 14 Southern States could share with educators and governors on the Southern Regional Education Board and representatives of colleges the responsibility of planning and carrying out regional education programs."

Material for this first conference included data on the region and its economic status as well as the comparative status of higher education in the region with the rest of the Nation. On the basis of these data and on discussions during the conference, the delegates recommended that members of the legislatures from the States be designated to attend the annual meetings of the board in an advisory capacity, that the SREB prepare a report on the potential needs of graduate and professional training in the South with recommendations by the States for long-range planning of higher education, and that this report be distributed to the State legislatures.

Work conferences have been held each year since, and attendance has grown from 41 legislatures to 80. Two major developments grew out of these conferences: (1) The board adopted an amendment to the Southern Regional Education Compact which adds one extra member per State, with the stipulation that at least one member from each State be a legislator; and (2) the board authorized the formation of a Legislative Advisory Council to the SREB with the twofold mission of advising the SREB on legislative matters pertaining to higher education and to act as the steering committee for the annual Legislative Work Conference.

Research into Southern Needs

In addition to carrying on the work of established memoranda of agreement programs and contracts, the SREB from its beginning has carried on a program of research into the needs of the South in an expanding economy.

In doing such research, the SREB is carrying out one of its major purposes, that of aiding States in developing educational programs which are designed to meet the economic and social needs of the South. Clearer pictures have been needed in many fields of the status of personnel, future needs, and how to meet these needs. Surveys and studies have been conducted in agricultural sciences, architecture, chemistry and chemical engineering, educational television, foreign affairs, government, mental health, psychology, training teachers of exceptional children, veterinary education, and nuclear energy. In some cases, these studies have led to the establishment of regional programs to deal with problems discovered or emphasized during the study. In others, studies indicated that no further developments were needed.

In 1953, the Southern Governors' Conference requested that the SREB study the needs and resources in training and research in the mental health programs of the 16 Southern States. The study involved thousands of people and reached into the farthest corners of the States, culminating in a regional conference on mental health in July 1954. The findings of the survey were reported to the Southern Governors' Conference at Boca Raton, Fla., in November 1954 and carried the endorsement of the SREB's Commission on Mental Health Training and Research (Gov. Frank G. Clement of Tennessee, chairman); each of the official State committees on mental health training and research; the regional conference; and the third annual Legislative Work Conference.

Program in Mental Health

Illustrative of the developmental and study phase of the SREB's operations is the Southern Regional Program in Mental Health Training and Research.

Findings of the mental health survey were reported under three major headings: That mental disorders were a growing burden upon the States; that the States needed more trained personnel in their mental health programs; and that the States needed new knowledge. The survey found that, because of the lack of funds, personnel, and research facilities, almost three times as many mentally deficient persons needed care in the Southern States than were receiving it. Secondly, that the South needed about 6 times as many trained persons for mental health programs as it had and that it did not have the training programs available to make up present deficits or future needs. Thirdly, it found that, although research on mental illness had more than repaid its cost, no region of the country did less mental health research than the South and that even existing research resources of the region were not being utilized fully.

In order to assist States in strengthening their training and research in mental health as indicated by the report, the Governors' Conference asked the SREB to establish a continuing regional program in mental health training and research. This program now operates within the framework of the SREB and is responsible for coordinating a region-wide effort to help States and institutions to meet the problems outlined in the survey.

Nuclear Energy Survey

A similar survey was conducted, again at the request of the Southern Governors' Conference, on the South's status and potential in nuclear energy developments. On the basis of a year of intensive study, the governors recommended during their 1956 conference that a council be formed to help guide a regional program to deal with personnel in the nuclear energy field.

Exceptional Children Project

A third project was launched recently to help States and institutions in their efforts to secure an adequate supply of teachers for the South's 1,000,000 exceptional children.

Problem of Increased College Enrollments

In addition to these special fields SREB has studied, the total picture of higher education has not been lost. It continues to compile and publish college enrollment projections. These projections showed as early as 1952 that colleges and universities in the region can expect an enrollment increase of 85 percent by 1970 and that, unless the region takes steps to increase the supply of faculty members, a serious shortage will develop rapidly with an accompanying deterioration of educational quality.

Thus, faced with a radical change in the educational problem brought about by this tremendous prospective influx of new students, the SREB is exploring

ways in which it can aid colleges and universities and the States in taking the impending enrollment increases as an opportunity, rather than a problem.

Educational and Management Problems

To aid in developing a program of assistance to institutions and States, the Carnegie Corporation of New York recently made a grant of $460,000 to the SREB for research and experimentation on the educational and management problems of colleges and universities. The grant will be used to find answers to some of the questions which crop up repeatedly in all the fields thus far explored by the SREB.

According to Dr. Ivey, higher education has done little in the way of research on its own operations in comparison with the extent of operational research by America's most vigorous and imaginative industries. It is his view that, although higher education "has grown into a multibillion dollar business and alumni and legislators are being asked for increased support every year . . . there is very little evidence that these funds should be expended within the present educational framework."

Some of the questions, which need to be answered if colleges and universities in the South are to meet the challenge of higher enrollments successfully, include:

How can students of different aptitudes be assisted in their studies to move through their college careers more efficiently? How can existing and projected physical plants be used more efficiently? How can university management be made more efficient without sacrificing educational values?

In trying to find answers to these and other important questions, the SREB will work with colleges and universities in the region. Plans call for the establishment of several research and training centers; establishing internships in training and research in higher education; gathering data on theory and methods of research on university operations; and developing new methods of university planning and experimentation for improving instruction and research.

Conclusion

Thus, since its inception and with increasing emphasis during the years, the SREB has been aiding States and institutions in the South in planning educational programs of high quality, designed to meet the social and economic needs of the whole region.

Pioneering in regional planning for higher education, the SREB, its compact, and its board have set the pattern for such developments in several other regions of the nation. The Western States several years ago organized the Western Interstate Commission for Higher Education, and the New England States recently organized a similar interstate compact called the New England Board of Higher Education.

Nuclear Congress To Be Held

FIRST DETAILS of a 1957 Nuclear Congress, described as "possibly the most significant event of its kind ever held in this country," have been made public. To be held at the Philadelphia Convention Hall, March 11–15, the congress is sponsored by more than 20 engineering and technical societies and will include a concentrated program of more than 200 technical papers, 2 days of conferences for business executives interested in atomic energy, and an international atomic exposition where developments related to peacetime nuclear operations will be displayed.

College Enrollments of Veterans Still Large

APPROXIMATELY one out of every four males in the Nation's colleges and universities is a veteran, enrolled under the Korean GI Bill, according to the Veterans Administration. Furthermore, large numbers of veterans are expected to be attending schools of higher learning for at least the next 5 or 6 years.

Complete fall enrollment figures under the Korean GI bill, released by VA, disclosed a record-breaking 473,000 veterans in college. This is 12 percent above last fall's Korea GI college enrollments of 416,600 and 8 percent higher than the previous record of 436,600, reached in the spring of 1956.

In addition to the 473,000 GI college students this fall, there were 287,000 other Korea veterans enrolled in schools below the college level, on-the-job training, and on-the-farm training. The 760,000 total—highest in the 4-year history of the Korean GI Bill—surpassed most predictions. Last year, total Korean GI fall enrollments numbered 707,000, and the number went up in the spring of 1956 to 735,000, a record which has just been broken. The Korean GI education and training bill will expire in 1965.

Television's Part in the College and University Program

By FRANKLIN DUNHAM*

A COLLEGE or university administrator, taking a first look at television, its present use and future potential, is apt to view its revolutionary possibilities with unusual interest. For example, if a thousand students could be taught as effectively by television as fifty in a conventional classroom, perhaps the building expansion program might need another look. If one professor could do the work of many, perhaps the faculty shortage problem could be more easily solved. If expensive laboratory equipment used for demonstration were capable of greatly increased use, one laboratory might serve for many.

Moreover, the services of the institution to its community, especially the State-supported institution, on first view, seem to be capable of expansion and at only a slightly increased cost. The quality of the work done may also be greatly advanced in a shorter time than past planning has contemplated. All these are possibilities in theory. What has happened in practice?

Higher Education Television: Beginnings

When the television channels for education were set aside by the Federal Communications Commission in March 1952, they represented about 12 percent of all the channels available to the United States for television. This allocation was made for open-circuit broadcasting (a 60-mile radius from the transmitter for primary coverage). Since then, closed-circuit broadcasting within a campus area has also been introduced, requiring no specific license from the FCC nor, of course, FCC supervision.

The Joint Committee on Educational Television was formed by the American Council on Education, the Chief State School Officers, the American Association of Land-Grant Colleges and State Universities, and the National Association of State universities, specifically representing higher education. To be sure, the National Education Association, the National Association of Educational Broadcasters, and the Educational Television and Radio Center at Ann Arbor, Mich., and the Office of Education are interested in higher education purposes. Nor is there any lack of interest in this phase of television by the American Association of School Administrators, the National Congress of Parents and Teachers, and the National Citizens Committee for Educational Television. This committee is now the Joint Council on Educational Television, the watch-dog of education's interest in television with headquarters in Washington.

In the 5 years of existence, the committee has performed the herculean task of protecting the assigned TV frequencies and encouraging educational institutions to experiment with television. The cost of this educational experiment has been great—over fifty million dollars has been expended, some twenty million being represented by the Ford Foundation or its allied funds in donations to the vast program which has been instituted.

The Iowa State College at Ames was the first institution of higher learning to enter the television field. In 1950, it went on the air with WOI–TV and extended service of the college to central Iowa. Over 20 years of experience with radio preceded the decision of Charles Friley, then president, to carry Iowa State into the homes of its constituent families, other citizens, and alumni. Because no other station was available in the area, all four networks, NBC, CBS, ABC, and Dumont offered affiliation and thus assured Iowa State of a steady and substantial income. But Dr. Friley had no intention of departing from his original purpose of education. Some programs of interest to farmers and workers appeared along with a classic experiment, "The Whole Town's Talking," which brought local public issues by means of town meetings to the attention of everyone in the area. "Iowa School Time" soon appeared with the cooperation of Iowa State Teacher's College and the University at Iowa City and still delivers a daily program schedule in varied subject-matter fields to the central part of the State.

The first station to avail itself of the educational frequencies was KUHT at the University of Houston, Tex. KUHT has rendered a superior service for nearly 4 years, and has provided, in addition to telecourses for credit, classroom programing for the students at greatly decreased costs through multiple classroom reception and competent instruction for the freshman and sophomore years. Such practical courses as nursing instruction for home-students

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were tried and became eminently successful in reaching thousands of young women who could not attend university classes. This type of course was given in cooperation with the city, State, and National Red Cross which used a successful format, already proved reliable, in direct classroom teaching.

More than one-hundred institutions of higher learning have successfully utilized television in their work and, of course, more are being added. In such a survey as this, a geographical pointing-up of the work may be of greatest value since it is the citizens of our cities, our States, and our country who are the direct beneficiaries of this new extension of higher education—particularly the intellectually curious and consciously underprivileged who hunger for an education which, through no fault of anyone, has hitherto been denied to them. Moreover, television offers an opportunity to libraries, museums, symphony orchestras, and other cultural mediums to *combine* with the colleges and universities of any area to make better use of all their facilities in the public welfare. This is an extraordinary byproduct of the educational uses of television.

New England

In New England, Harvard, MIT, Tufts, Boston College, Boston University, and the other cultural agencies of Boston have established WGBH–TV with the help of the Lowell Institute, as a leader, the Filene Foundation, the Ford Foundation, and other sources of financial aid. It is located near the campus of MIT in Cambridge. Its programs tap the brains of all the faculties of the combined colleges of the area. Its coverage includes much of Western Massachusetts and some areas of Vermont, Maine, New Hampshire, and Rhode Island, extending to Providence in the south and almost to Portland in the north, which makes it a distinctly New England Council.

One outstanding program has been in a foreign language course, French, presented by both phonetic and graphic means, so easily adaptable to television. WGBH–TV is a noncommercial educational station, one of 25 such stations now rapidly assuming importance over the United States.

At the University of Connecticut at Storrs, whose president, Albert N. Jorgensen, is chairman of the Joint Council on Educational Television, an experiment with closed-circuit television is just beginning next semester, but its preparation has been long and much research has been done. At Yale a student-operated TV experiment has been conducted on the campus, and the school of drama has been producing plays on local New Haven stations. Dr. Gesell's courses on child development have been broadcast on a national network; and other Yale faculty members representing many fields of scholarship have appeared on national programs.

The Middle States and District of Columbia

In New York City, every institution of higher learning has had its appearances on TV. Columbia University, both at its communications center and at the graduate school of journalism provides courses in varied uses of television and training for writers, producers, and executive managers of stations. It has produced a program in a classroom setting for a seminar in English and has experimented in many new television formats over local station outlets.

New York University at Washington Square has a complete closed-circuit television set of studies and outlets and is teaching English composition this semester by television. Over 400 students are enrolled in this course, which is required for freshmen. The decision to teach this course was made on the basis of long experience in television, in telecourse production, and in public relations programs. Carroll V. Newsom, New York University president, who represents the American Council on Education on the National Joint Council Board is a pioneer in the study of television to serve educational needs. He is also head of the Metropolitan Educational Television Association, which is setting up studios in the Carnegie Endowment Building at UN Plaza in New York City preparatory to serving the whole metropolitan area of New York, nearby Connecticut, and New Jersey.

New York University has an extensive course-offering in television, having been the first in New York to establish a radio workshop and the first to establish a department of communications in the school of education. Charles Siepmann is the director of that department, and is the author of many books in the broadcasting field.

City College, Queens College, Brooklyn College, Hunter College, Fordham University, St. John's University, Hofstra College, Adelphi College all present television programs. City College has a motion-picture center especially adaptable to TV, and Hofstra College has been a leader in both closed-circuit and open-circuit programing.

In New Jersey, Princeton University has con-

ducted a series of Sunday afternoon programs in many subject areas on the NBC networks for several years. The New Jersey State Teachers College at Montclair is a pioneer in closed-circuit programing, and was the first to use color transmission on a campus-wide scale. It was here that the original testing of programs for grade schools was conducted—a controlled experiment from the Asbury Park TV station on a countrywide basis. Rutgers University and the State Teachers College at Trenton have also been experimenting in TV. Rutgers has long used television for agricultural extension work over Newark facilities. The department of English of Rider College uses the facilities of WFIL–TV Philadelphia to teach courses.

In Pennsylvania, three important television centers are established—Philadelphia, Pittsburgh, and State University. At State University an extensive experiment, originally sponsored by Milton Eisenhower, has been carried on in closed-circuit television. It is a part of a nationwide program of research, supported by the Fund for the Advancement of Education. This controlled experiment conducted in three phases has tested the effectiveness of teaching with television. General chemistry and general psychology were subjects for the first year; economics, music, speech, air science, elementary business law and elementary accounting, the second year; and history of art, architecture, mathematics, French, general zoology, and instructional understanding, the third year. The experiment, under the direction of Harry Carpenter of the university faculty, has already produced significant results; it suggests that teaching over television may be as effective as regular classroom procedures and has the additional advantage of reaching large numbers of students.

Pittsburgh has its own educational station with the universities and colleges of the area cooperating. The University of Pittsburgh, Carnegie Tech, Chatham College, and Duquesne University use its facilities. This semester Chatham College is presenting college courses over WQED, the local educational station.

Philadelphia has been a pioneer in educational television with its University of the Air on WFIL-TV and has broadcast, regularly at 11 a. m. each weekday, courses for 13 institutions in the area. Temple University and the University of Pennsylvania both give training courses, and St. Joseph's College has successfully taught courses by television in philosophy, ethics, and logic. A new educational television station WFYY is to open in Philadelphia early in 1957.

In Maryland, Johns Hopkins University in Baltimore and Baltimore City College have been deeply interested in television. The Johns Hopkins Science Review is in its 6th year on the air over a national network (now titled "Johns Hopkins File 7"). Baltimore City College gives courses for credit over station WBAL–TV; and over the same station the University of Maryland School of Medicine, located in Baltimore, has for several years given series of programs on public health.

The universities of Washington, D. C., have contributed much to television. Amercian University maintains its own studios in the school of communication and offers training in writing, production, and in educational uses of television; Georgetown University maintains the Georgetown Forum, a discussion of public issues; George Washington University carries on regular programs in science, history, and public affairs; and Catholic University presents plays from its school of speech and drama.

The South and Southwest

In Virginia, the University of Virginia, William and Mary College, and the University of Richmond present programs over Richmond stations, and the Barter Theatre with its college-level courses produces plays over nearby Bristol facilities.

The University of North Carolina owns its own television station, WUNG–TV, representing an investment of nearly a million dollars and maintained by State funds. This station is an integrated service with the Communications Center and supplies a daily schedule of programs to the major population of the State. Studios are maintained at the State College in Raleigh and the Women's College in Greensboro, as well as at Chapel Hill, and a network of commercial stations rebroadcasts many university offerings. An outstanding program has been one on the Bible (on Sundays), which has a large audience. Many subject-matter fields are covered, however, and the station is truly an extension of the State university to the people of North Carolina.

The University of Georgia at Athens is now building its own station, assisted by a grant from the Kellogg Foundation's Continuing Education fund. The Atlanta School Board will soon open a station which could be made available to Emory University,

Atlanta University, and other institutions now broadcasting over commercial stations.

In Tennessee, Southwestern at Memphis and Memphis State College have cooperative arrangements with educational stations. Fisk University in Nashville has just begun an extensive experiment in closed-circuit television under a grant from the Fund for Advancement of Education (FAE). The subjects taught at Fisk by television are chemistry, physics, modern languages, psychology, and child development. The experiment calls for the use of advanced students in a tutorial program. Next year, dormitories will be remodeled to be used for TV instruction and a communications laboratory built for third-year developments.

In Alabama, the State has built three complete stations—Munford, Birmingham, and Andalusia—which serve all the institutions of higher learning in the State. The University at Tuscaloosa has its own studios from which programs are sent by microwave to transmitter locations, as has Alabama Polytechnic Institute at Auburn. Inservice teacher training and graduate courses are offered at the university. Birmingham also has its own studios. The universities and the State department of education are embarked on a program to make education available to everyone in the State.

Oklahoma has embarked on a plan similar to Alabama's with its first station at Oklahoma City, studios being at the University of Oklahoma in Norman. Extension courses are being offered, and plans are being made for another station at Tulsa which will serve the University of Tulsa and its constitutent extension audience.

In Louisiana Tulane University and Louisiana State University do not yet have the facilities of an educational station since the New Orleans educational station is not yet on the air, but both have used commercial facilities for some time for programs from their respective campuses. Station facilities will also soon be available at Monroe in a station owned by the State.

Texas and Florida have pioneered in the use of television—Texas at Houston particularly and Florida in the Dade County School Center at Miami, the University of Florida at Gainesville, and Florida State University at Tallahassee. For some time both Houston and Miami have had the advantage of owning their own TV stations. Houston, as was mentioned earlier, has successfully taught the first 2 years of college by television courses, and the city of Miami is soon to begin an experiment with the University of Miami in carrying on, by television, make-up classes and courses for advance standing.

The Middle West

The great Middle West, where educational TV began, has many university programing outlets. The following own their own stations: The Ohio State University, Michigan State College, University of Missouri, Notre Dame, University of Nebraska, University of Wisconsin, University of Illinois, and the Iowa State College at Ames. The following have cooperative arrangements with educational stations: University of Cincinnati, Xavier University, University of Chicago, DePaul University, Illinois Institute of Technology, Northwestern University, St. Louis University, Washington University, University of Omaha, Creighton University, Marquette University, Loyola University (Chicago), Chicago Teacher's College, Stephens College, Western Reserve University, Case Institute of Technology, State University of Iowa, University of Minnesota (soon to have educational facilities in Minneapolis), Chicago Junior College, University of Michigan, Wayne University, University of Detroit, University of Wichita, University of Kansas (Medical School at Kansas City, Kansas), University of Kansas City, Miami University (Oxford, Ohio), Purdue University, with many other institutions being added daily to the list.

What do they offer? The Chicago junior colleges, for example, offer over WTTW, Chicago's educational station, a complete junior college curriculum for advanced standing to prospective freshmen who are still in high school and for regularly registered TV students taking courses at home. Thirty-four hundred persons are presently enrolled in first-year college. They will take regular examinations and have the advantage of counsel and complete study-guides and texts—a plan that has had thorough testing at the University of Houston, Texas, for resident students. Washington University and St. Louis University are now weighing the merits of the same plan for students at St. Louis University beginning the fall semester, 1957.

Stephens College, Columbia, Mo., has carried on a successful experiment in teaching with closed-circuit television. In this experiment a guest teacher has appeared on television in the evening, and students have used the program as a basis for their discussion.

The State University of Iowa is experimenting under closed-circuit conditions with a course in American government in a discussion format provided for under the Program for Utilization of College Teaching Resources of the FAE. It has a long history of programing from commercial stations under the auspices of the department of speech and drama, but this experiment is exclusively within the undergraduate college.

Miami University at Oxford, Ohio, is experimenting with TV in the common curriculum for the first 2 years of college. It will soon open its new low-power television station as a development of its present closed-circuit operation. Large lecture sessions with small discussion groups are a part of the plan of instruction.

Purdue University is another institution proceeding with tests under the Program for Utilization of College Teaching Resources. Here various types of audio-visual aids will be used in an experimental course in chemistry to discover what type—still visuals, motion-pictures, or television—will best fit teaching procedures.

All the foregoing are typical of the wide range of the experimentation being made in television classroom uses. Teacher-training experiments are being conducted by the Texas State Department of Education, the New Jersey State Teachers College, and the Hagerstown (Maryland) public schools. The Hagerstown project, embracing all schools in Washington County, is concerned with practical training on the job in the use of television in the classroom. Office of Education specialists are serving as consultants on the Hagerstown project.

Mountain States and Pacific Coast

The Mountain States of Colorado, Utah, Arizona, and New Mexico have made progress in the educational uses of television. Denver has its own station, and the University of Denver has excellent facilities for teaching the communication arts and demonstrating them. The University of Utah has long offered programs over Salt Lake City facilities and now has a construction permit for its own station. The State College of Arizona at Tempe utilizes nearby facilities. The University of New Mexico at Albuquerque also uses local facilties.

The Pacific Coast has carried on many experiments in television, with a permanent program of utilization, that has its roots in Seattle and Portland, and in San Francisco, San Jose, Palo Alto, Santa Barbara, Los Angeles, San Diego and other points in California. The University of Washington owns its station and offers credit courses in many subject-matter areas. It also has an excellent training center, as does the State College at Pullman. The nearby Idaho State College in Pocatello and the Montana State College at Bozeman are now experimenting with complete closed-circuit operation.

The University of Oregon—whose former president, Harry K. Newburn, now heads up the National TV Center at Ann Arbor—the Oregon State College, and the University of Portland have all experimented with television. A station exclusively for educational purposes is also being planned in the State.

San Francisco State College offers credit courses over KQED, the local educational station. The University of California's faculty and that of Stanford University provide regular courses over KPIX and KQED. Stanford, where Stanley Donner is television director, has had a long-established and successful course in television. San Francisco State has its own studios. The San Jose State College also has its own closed-circuit studios and has produced a program on mental therapy this year. In the auditorium and classrooms on its new campus it has teaching facilities for training and for reception of programs.

As the new State college campuses develop (San Jose already has 10,000 students), wider uses for television will doubtless be found in the expansion of the program throughout the State. The Santa Barbara campus and the Los Angeles campus of the University of California offer training opportunities. The University of Southern California, as noted, has pioneered in extension courses for credit, including Frank C. Baxter's course on Shakespeare. It has fine teacher equipment and a department of telecommunications under the able direction of Kenneth Harwood, president of the National Society for the Study of Communications. The university offers many courses and conducts the USC Teleforum, directed by its chancellor, Rufus B. von KleinSmid. The San Diego State College has courses for credit, an excellent training staff and the advantage of closed-circuit TV.

Puerto Rico

In San Juan, Capital of the new Commonwealth of Puerto Rico, the University of Puerto Rico will soon open its own station. It will concentrate upon

fundamental education and extension of college courses and bring educational programs into the homes of the people.

Summary

What has been accomplished in 4 years? The college or university administrator whose institution makes use of educational television might well think that television has brought great credit to his institution, has extended its campus to greater numbers, has brought about an adaptation of some courses, and produced increasing registrations. It is not known whether television teaching is superior to classroom teaching, or how serious the sacrifice of teacher-contacts may be. The lecture has proved effective on television. The laboratory demonstrations by television are excellent. Perhaps the seminar has saved us. At any rate, the examinations have saved the students. They rate invariably as well in their marks as those who have taken the same courses in the classroom.

Do Junior Colleges Become Four-year Colleges?

By WALTER CROSBY EELLS AND S. V. MARTORANA*

THROUGHOUT the Nation high interest is currently being shown in the junior college or community college as an integral part of the American educational system. This type of institution is attracting attention because of the concept of educational service for helping to meet the impending "tidal wave of college students."

A recent statement of the President's Committee on Education Beyond the High School says:

> The growth of the community and junior colleges is a significant development of our educational system in this century and is probably the next logical step in filling in and rounding out our educational system. . . .[1]

From time to time, however, educational leaders and others have said that the junior college is a very unstable institution, that it is transitional in character, and that it is eager to transform itself into a 4-year college granting the baccalaureate degree.

These statements imply that the junior college has no permanent place or unique function in the American educational system, that it is only a temporary expedient and a transitional institution. What are the facts? Do they support such generalizations? Is the junior college a fad or a fixture?

This article reports an analysis of certain objective information which casts light on these questions. It is concerned chiefly with the question of frequency of change and its relation to geographic location, size of the institution, and type of institutional control. A later issue of *Higher Education* will carry an article on changes in curricular offerings after the "metamorphosis" has occurred.

The data on which this article is based are taken primarily from the publication, *Educational Directory, Part 3, Higher Education*, compiled annually by the Office of Education. Directories dating back to and including the 1945–46 issue have been used in the analysis.[2]

Chronological Distribution

Since 1945–46 the *Directory* has listed 699 different institutions of the 2-year type. Of these, 91 or an average of only 8 a year, or less than 2 percent, have become 4-year colleges granting the baccalaureate degree—striking evidence that the change from 2-year to 4-year status is rarely made. The number of institutions thus changing their status each year as reported in the *Directory* is shown in table 1. This tabulation shows that the number of institutions changing from 2-year to 4-year status has ranged from less than one-half of 1 percent to almost 4 percent in the different years.

Of the 91 institutions, 85 are still listed in the

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[1] The President's Committee on Education Beyond the High School, *First Interim Report to the President*, p. 11, Nov. 20, 1956.

[2] Prior to 1949–50 the *Directory* listed junior colleges separately in each State. Since that date it has classified all institutions of higher education in five classes, Class I being those that offer "2 but less than 4 years of work beyond the 12th grade." All Class I institutions since 1950 have been included with community-junior colleges in this study, although a few of them might not have been included in the earlier method of reporting.

Table 1.—Number and percentage of colleges changing from 2-year to 4-year status, 1945–56 [1]

Year	Total number of 2-year colleges	Number changing to 4-year status	Percent making change
1945–46	438	3	0.7
1946–47	436	6	1.4
1947–48	429	5	1.2
1948–49	451	8	1.8
1949–50	500	18	3.6
1950–51	541	2	0.4
1951–52	527	9	1.7
1952–53	529	13	2.5
1953–54	517	6	1.2
1954–55	518	8	1.5
1955–56	510	13	2.5
Average for 11 years	490.5	8.3	1.7

[1] The catalogs of these institutions and other historical statements furnished by the institutions sometimes give earlier dates for change. The *Directory* reports the first time the change was called to its attention. These dates are sufficiently close to show the general distribution. The catalogs of 13 institutions show that they changed to 4-year colleges before 1945, although the change is not shown in the Office of Education *Directory* until after that date.

1955–56 *Directory*. Three had been closed, and three were dropped because they did not meet the criteria adopted for *Directory* listing. Four institutions subsequently adopted the term "university."

Types of Institutions

More significant, however, than either the total number of changes or the number by year is an analysis of these changes by types of institution. For this purpose, the public institutions have been classified into two groups, State and local; and the private institutions into three groups, nondenominational, Protestant, and Roman Catholic. A State 2-year college is one which is controlled by a board representing the entire State or an important section of the State. A local junior college is controlled by a board which represents a district, usually consisting of a single municipality or sometimes of a county or other relatively small local area. Local districts usually contribute a significant part of the institution's costs of maintenance and operation.

The total number of institutions existing, as shown in the *Directory*, and the total number of changes, in the 11-year period for each of the 5 groups of colleges is shown in table 2.

Table 2 shows that of the total number of almost 700 junior colleges in existence during the 11-year period under study, 13 percent have changed from 2-year to 4-year institutions. Since junior colleges vary so much, not only in function and control but also in enrollment, this single percentage is not fully meaningful. It attains much greater clarity and significance if its constituent parts are considered.

Although the publicly controlled institutions constitute only slightly more than half of the total number, they enroll almost 90 percent of the junior college students of the country. In this very important group, only 5 percent have changed to 4-year colleges, while of the almost equal number of privately controlled institutions, but with much smaller enrollments, 21 percent have changed.

But even the publicly controlled junior colleges are by no means a homogeneous group. It is the local junior college, frequently referred to as the community college, that is the largest and fastest growing of the public junior colleges. In the judgment of many educators who have given thought to the matter, the community junior college, closely responsive to local needs and conditions, controlled by locally elected boards of education and frequently supported at least in part by local funds, is con-

Table 2.—Number and percentage of junior colleges, by type, changing from 2-year to 4-year status, 1945–56

Type of junior college	Total number	Number changing status	Percent changing status
All types	699	*91	13.0
Public:			
State	58	15	25.9
Local	294	3	1.0
Total	352	18	5.1
Private:			
Nondenominational	140	17	12.1
Protestant	140	31	22.1
Roman Catholic	67	25	37.3
Total	347	73	21.0

*Includes 21 institutions not found in the annual directories of the American Association of Junior Colleges. They are included in this study because they are listed by the Office of Education directories as offering 2 years but less than 4 years of college work, even if not commonly included among typical junior colleges. They comprise 5 of the State group, 5 of the Protestant group, and 11 of the Catholic group. They include teachers colleges and normal schools, Bible institutes and seminaries, technical institutes, and institutions founded as 4-year colleges but listed temporarily as doing only junior college work until they had their first baccalaureate graduates. Thus the total number of junior colleges changing to senior college status in the 11 years under review would be only 70 if the more commonly accepted understanding of the term were used.

sidered as the typical and most significant institution at this level—the junior college of the future.

Furthermore, the local institution is the type most commonly under consideration in recent State surveys and studies looking toward the formation of additional post-high-school educational centers. Florida, New Mexico, Maryland, and Michigan are currently making such studies.

The number of these local institutions operating in the 11-year period is more than 5 times that of the State type. Almost 6 times as many have been organized in that period. The *most significant figure* in table 2 for most purposes is the 1.0 percent change shown for the 294 locally controlled institutions. The local junior or community college is thus shown to be a *highly stable* institutional type. By contrast more than a quarter of the State junior colleges have become 4-year institutions.

Among the privately controlled junior colleges the Roman Catholic institutions have shown the highest rate of change, more than one-third of them having become baccalaureate-degree colleges. This is more than three times the frequency for the nondenominational group of private institutions. It should be noted, however, that several of these were founded as 4-year institutions, and were not classified as junior colleges until they had their first graduating classes. The junior colleges under Protestant control or affiliation occupy an intermediate position between the other two groups of private institutions. Their denominational affiliation is as follows: Baptist 9, Methodist 5, Presbyterian 5, Mennonite 2, Seventh-Day Adventist 2, and 8 other denominations, 1 each.

The total number of junior colleges in the 11-year period and number changing to 2-year status is shown in figure 1.

It might be expected that the number of changes among colleges of each type would bear to the total number of changes (91) the same percentage relationship that the number of colleges of each type bears to the total number of colleges (699). A comparison of the two circles, however, shows that the changes among the private colleges as a group are very much greater than this normal expectancy—half the total number of colleges account for four-fifths of the changes. Among the private colleges, the nondenominational institutions are very near the level of normal expectancy (19 percent compared to 20 percent), while the Protestant colleges are almost twice the figure that might be expected (34 percent compared to 20 percent), and the Roman Catholic institutions are almost 3 times the normal expectancy (27 percent compared to 10 percent). The State-controlled public institutions are at a level more than twice that which might normally be expected (17 percent compared with 8 percent). Standing out very significantly and in striking contrast are the local public community-junior colleges at a level only one-fourth of that which might be expected (13 percent compared with 42 percent).

Geographical Distribution

The geographical distribution of the 91 institutions is shown on the map of figure II, by the 5 major types of control already discussed. They are well distributed throughout the Nation, with the larger number in the Eastern and Southern States. They are found in 32 of the 48 States and in Puerto Rico. Texas and New York have the largest number, 10 each. The changes in public junior colleges, however, are limited to 12 States and all 3 of the locally controlled institutions are found in Texas. They are (1) Hardin College, Wichita Falls, which changed to a 4-years college in 1949 and became Midwestern University in 1950; (2) Pan-American College, Edinburg (formerly Edinburg Junior College) which changed to a 4-year college in 1952; and (3) Lamar State College of Technology, Beaumont, which changed to a 4-year college in 1952.

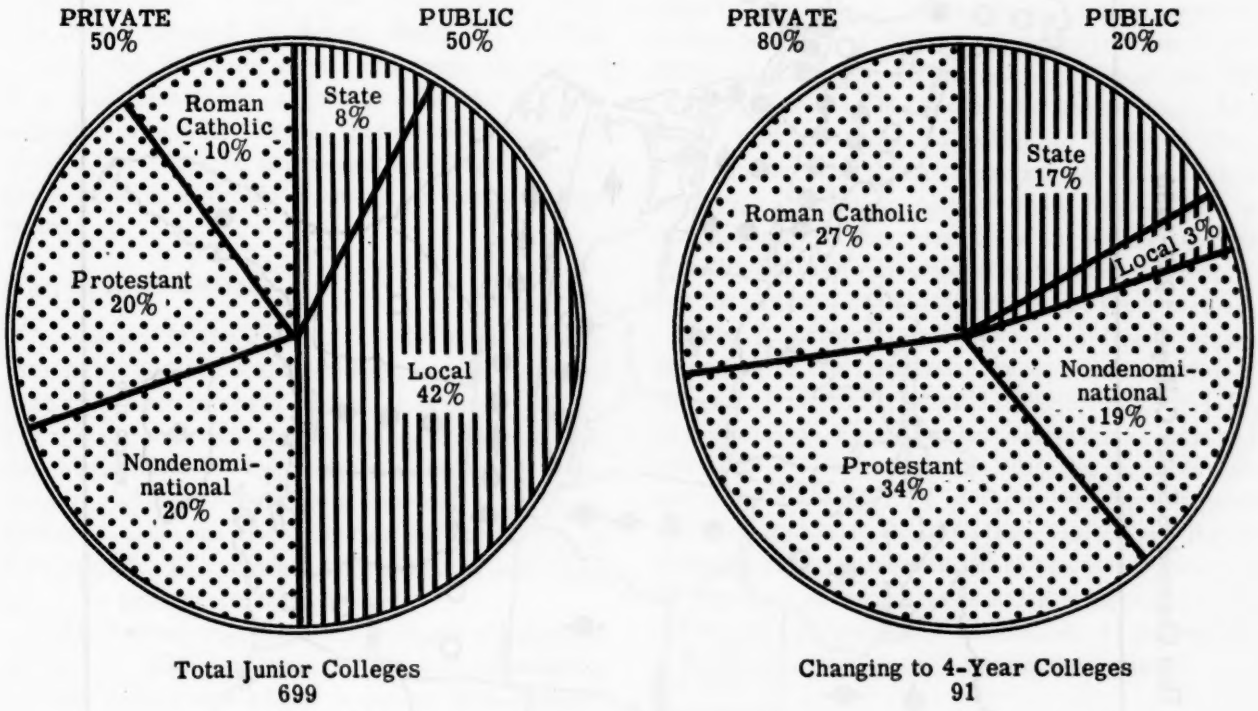
In California, which is second in population of the States and which has always had the largest number of publicly controlled junior colleges (58 according to the 1955–56 *Directory*), no 2-year college has changed to a 4-year college. This is true not only in the 11 years under study, but also in the almost 50 years since the first public junior college was established in that State.

Accreditation

The extent to which colleges that changed status had acquired accreditation prior to the change is indicated by the following summary:

Accredited by a regional association		42
New England Association	3	
North Central Association	6	
Northwest Association	6	
Middle States Association	6	
Southern Association	19	
Western Association	2	
Accredited by a national professional organization		3
Bible	2	
Technical institute	1	
No national or regional accreditation		46
Number changed		91

Figure 1.—Analysis of Junior Colleges, by Type of Control, 1945–56



Less than half of the institutions at the time of their change of status had been accredited by national or regional associations. It might be pointed out, however, that some had not sought such recognition, apparently being satisfied with State department or State university accreditation.

In view of this finding, one may wonder why so many of the 2-year colleges have become 4-year colleges. If they had not achieved recognition as regionally accredited 2-year institutions, then presumably their reasons for seeking to become 4-year institutions were unrelated to accreditation.

Enrollment

Enrollments in the 91 institutions ranged from 29 students to 2,125 students. Table 3 shows the number of institutions in terms of enrollment at or near the time of change to 4-year colleges.[3]

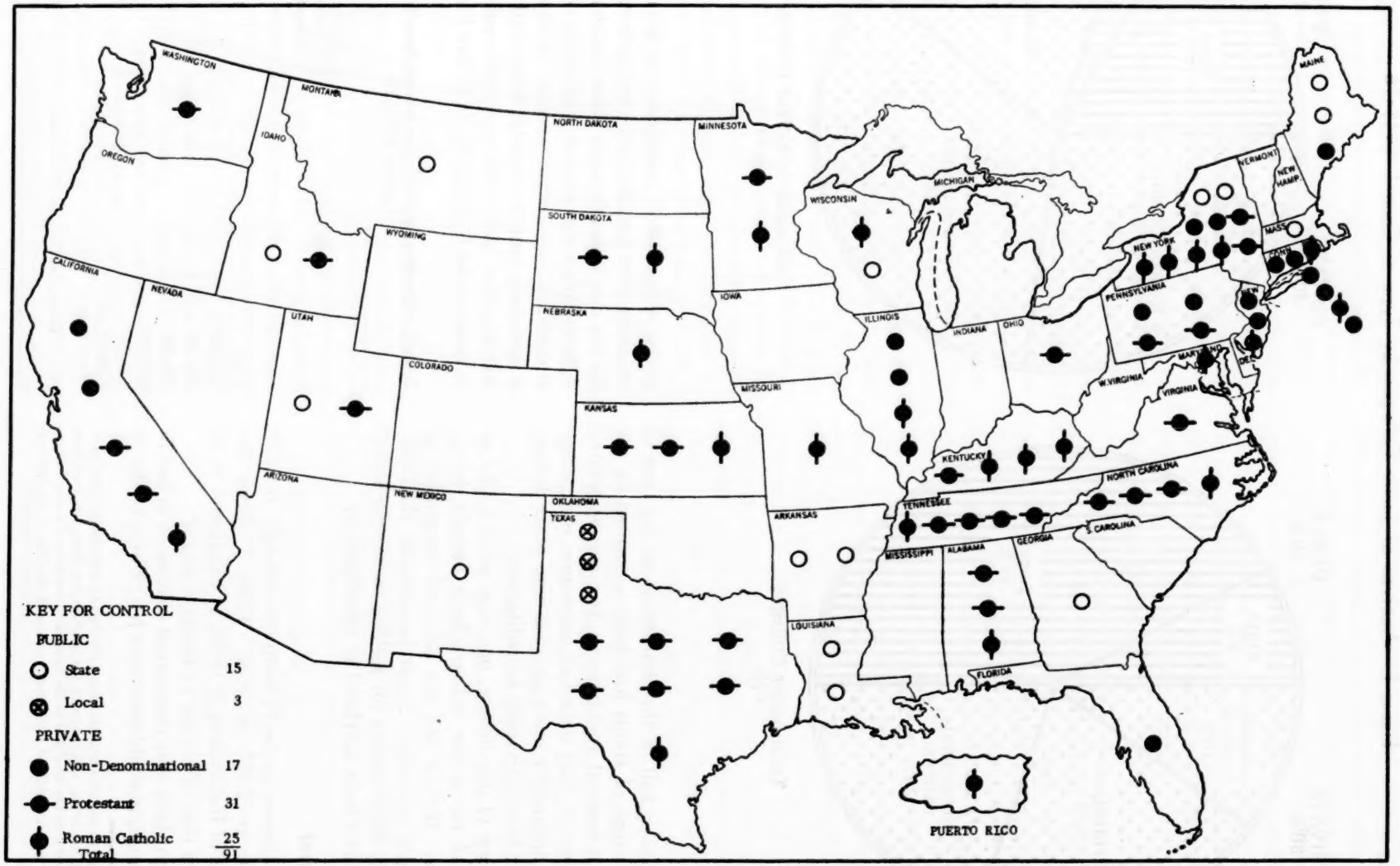
Unless there were exceptional conditions to justify the change, it would seem that few, if any, of the 39 junior colleges with enrollments of fewer than 200 students were justified in becoming 4-year colleges; for the new status brought about necessarily greater differentiation and extension of course offerings and a resultant increase in expense. This observation is especially true for the 15 which had fewer than 100 students each. For the junior colleges of 400 or more students, however, there can hardly be any

Table 3.—Enrollments of colleges changing from 2-year to 4-year status, 1945–56

Enrollment	Number of junior colleges	Percent of total number
1–99	15	16.4
100–199	24	26.4
200–299	14	15.4
300–399	10	11.0
400–499	3	3.3
500–999	16	17.6
1,000–2,199	9	9.9
Total	91	100.0

[3] Data have been taken from the annual *Directory* for 1948–49 and later years. For the 14 institutions which changed status before that date, data have been secured for 8 from the *Directories* of the American Association of Junior Colleges and for 6 from unpublished institutional reports in the files of the Office of Education.

Figure II.—Geographical Distribution of Junior Colleges That Changed to Senior Colleges, 1945–1956



criticism of the change from the standpoint of enrollment. This group of 25 institutions, only 25 in number, constitutes less than one-third of those that have changed to 4-year status. Doubtless some of the 91 would have been more effective if they had remained as junior colleges. This is indicated in part by the fact that at least 3 of them, after a few years of experience as 4-year colleges, have found it desirable to revert to junior college status.

Age, as Junior College

A measure of the stability of the junior colleges that have become senior colleges, is the length of time that each of them existed as a junior college. For this purpose the dates of change as shown by the annual *Directory* are used, although in some institutions the change was made a year or two or more before it came to the attention of the Office of Education.[4] This possible error does not materially affect the general situation, however.

Table 4 shows that the average length of existence of the institution as a junior college before becoming a senior college was almost a quarter of a century, and was fairly uniform except for the Roman Catholic group. If the 25 Catholic institutions were excluded, the average would be almost 26 years. Less than one-sixth of the total group had a junior college existence of less than 10 years, and more than half of these were Roman Catholic institutions.

Table 4.—Duration of operation as 2-year colleges of junior colleges which changed from 2-year to 4-year status, 1945–1956

Type of college	Number of institutions	Average years as junior college	Number less than 10 years as junior college
Public:			
State	15	30	2
Local	3	27	0
Private:			
Nondenominational	17	25	2
Protestant	31	24	3
Roman Catholic	25	17	8
All types	91	123	15

[4] The *Directory* makes it a policy to continue a 2-year classification for an institution until it has conferred baccalaureate degrees, not when it has announced the change and added junior or senior instruction.

Changes From 4-Year to 2-Year College Status

Some 2-year institutions that became 4-year colleges have given up their effort to do 4 full years of college work and have become junior colleges again. With small enrollments in the more specialized and expensive work of the junior and senior years they found that it would be better to husband their limited resources and concentrate on doing better work at the junior college level. There was a marked trend in this direction in the earlier years of the 20th century, particularly in Texas and Missouri, but the shift has been limited in the 11 years studied.

Only 7 senior colleges have been found which, according to the *Directories*, have changed to junior colleges; 1 each in 1946–47, 1948–49, and 1954–55, and 4 in 1955–56. Two are located in Texas and one each in Arkansas, Idaho, Illinois, New Mexico, and New York. Three of these—the New Mexico Military Institute, Ricks College, Idaho, and Butler College, Texas—are included in the larger group of 91 reported above. One is a State institution, the others are all privately controlled: 4 Protestant, 1 Roman Catholic, and 1 nondenominational.

Conclusion

Do junior colleges become 4-year colleges? The best available factual evidence supports the general answer: No. Such change is unusual even among the privately controlled institutions, the group in which the transition has taken place most frequently. Among the typical community-junior colleges, the locally controlled institutions, the change of status has occurred in only 3 instances out of almost 300 institutions. The tendency to change from a 2-year to a 4-year college is found most frequently among 2-year colleges that are State controlled and by the ones under church-related auspices, especially the Roman Catholic institutions.

As a guide to State and local school systems that are planning to extend their facilities for higher education, therefore, the results of this study suggest that there is little factual basis for the frequently expressed fear that establishing 2-year community-junior colleges will lead ultimately to a rash of 4-year colleges, granting the baccalaureate degree. The best safeguard against this happening appears to be to establish true community colleges, institutions committed to concentrating on extending post-high-school educational opportunities in a rather clearly defined locality whose population resides largely within daily commuting distance of the college.

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